



R2500C

Engine MTU , 16V4000G63E
 Alternator LEROY SOMER , LSA51.2VL90

STANDARD FEATURES

- Connection terminal block "rental type"
- Bulk tank
- Water separator pre-filter
- Voltage adjustment
- Drainage pump
- Fork lift
- Battery isolating switch
- 3 track valves
- Emergency lighting/Shut-off valve
- Rental specific soundproofed contenergy



| Voltage | Power ESP kWe/kVA | Power PRP kWe/kVA | Standby Amps |
|---------|----------------------|----------------------|--------------|
| 415/240 | 2000 / 2500 | 1818 / 2273 | 3478 |



POWER DEFINITION

PRP : Prime Power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO 8528-1. A 10% overload capability is available for a period of 1 hour within 12-hour period of operation, in accordance with ISO 3046-1 –

ESP : The standby power rating is applicable for supplying emergency power in variable load applications in accordance with ISO 8528-1. Overload is not allowed.

TERM OF USE

Standard reference conditions N/A °C Air Intlet Temp, N/A m A.S.L. 60 % relative humidity. All engine performance data based on the above mentioned maximum continuous ratings.

| Super Silent | Type | dB(A)@1m | dB(A)@7m | Dimensions | Weight | Tank |
|--|-----------|----------|----------|--|--|--------|
|  | EUR40 SSI | 79 | 69 | Long: 12192mm [480in] Wide: 2438mm [96in] Height: 2896mm [114in] | 27712kg [61077lbs] Net 30566kg [67367lbs] Gross | 2000 L |
| Silent | Type | dB(A)@1m | dB(A)@7m | Dimensions | Weight | Tank |
|  | EUR40 SI | 85 | 75 | Long: 12192mm [480in] Wide: 2438mm [96in] Height: 2896mm [114in] | 27022kg [59556lbs] Net 29887kg [65871lbs] Gross | 2000 L |



ENGINE SPECIFICATIONS

| | | |
|-------------------|------------------------------------|---|
| STANDARD FEATURES | Manufacturer / Model | MTU 16V4000G63E , 4-strokes, Turbo , Air/Water DC 16 X |
| | Cylinder Arrangement | V |
| | Displacement | 76.32L [4657.3C.I.] |
| | Bore and Stroke | 210mm [8.3in.] X 170mm [6.7in.] |
| | Compression ratio | 16.5 |
| | Rated RPM | 1500 Rpm |
| | Piston Speed | 10.5m/s [34.4ft./s] |
| | Max. stand by Power at rated RPM | 2162kW [2897BHP] |
| | Frequency regulation, steady state | +/-0. 5% |
| | BMEP | 22.7bar [329psi] |
| Governor : type | Elec | |
| EXHAUST SYSTEM | Exhaust gas flow | 495°C [923°F] |
| | Exhaust temperature | 7900L/s [16741cfm] |
| | Max back pressure | 300mm CE [12in. WG] |
| FUEL SYSTEM | 110% (Stand By power) | 538L/h [142.1gal/hr] |
| | 100% (of the Prime Power) | 503L/h [132.9gal/hr] |
| | 75% (of the Prime Power) | 369L/h [97.5gal/hr] |
| | 50% (of the Prime Power) | 247L/h [65.3gal/hr] |
| | Max. fuel pump flow | 1500L/h [396.3gal/hr] |
| OIL SYSTEM | Total oil capacity w/filters | 300L [79.3gal] |
| | Oil Pressure low idle | 3.5bar [50.7psi] |
| | Oil Pressure rated RPM | 7bar [101.4psi] |
| | Oil consumption 100% load | 2.52L/h [0.7gal/hr] |
| | Oil capacity carter | 240L [63.4gal] |
| THERMAL BALANCE | Heat rejection to exhaust | N/A |
| | Radiated heat to ambient | 90kW [5117Btu/mn] |
| | Heat rejection to coolant | N/A |
| AIR INTAKE | Max. intake restriction | 150mm CE [6in. WG] |
| | Engine air flow | 3300L/s [6993cfm] |
| COOLANT SYSTEM | Radiator & engine capacity | N/A |
| | Max water temperature | 104°C [219°F] |
| | Outlet water temperature | 100°C [212°F] |
| | Fan power | N/A |
| | Fan air flow w/o restriction | N/A |
| | Available restriction on air flow | N/A |
| | Type of coolant | Coolelf mdx |
| | Thermostat | 79/92 °C |
| GAS SYSTEM | HC | 150 mg/Nm3 Max |
| | CO | 300 mg/Nm3 Max |
| | Nox | 1700 mg/Nm3 Max |
| | PM | 50 mg/Nm3 Max |



ALTERNATOR SPECIFICATIONS

| | | |
|---|---|-------------------------|
| GENERAL DATAS | Manufacturer / Type | LEROY SOMER LSA51.2VL90 |
| | Number of phase | 3 |
| | Power factor (Cos Phi) | 0.8 |
| | Altitude | < 1000 m |
| | Overspeed | 2160 rpm |
| | Pole : number | 4 |
| | Exciter type | AREP |
| | Insulation : class, temperature rise | H / H |
| | Voltage regulator | R449 |
| | Sustained short circuit current | N/AC |
| | Total harmonics (TGH/THC) | < 4% |
| | Wave form : NEMA = TIF – TGH/THC | < 50 |
| | Wave form : CEI = FHT – TGH/THC | < 2 % |
| | Bearing : number | 1 |
| | Coupling | Direct |
| | Voltage regulation 0 to 100% load | +/- 1% |
| | Recovery time (20% Volt dip) ms | N/A |
| SkVA with 90% of nominal sustained voltage (at 0.4PF) | N/A | |
| OTHER DATAS | Continuous nominal rating @ 40°C | 2345 kVA |
| | Standby rating @ 27°C | 2580 kVA |
| | Efficiencies @ 4/4 load | 96.5 % |
| | Air flow | N/A |
| | Short circuit ratio;50 (Kcc) | 0.43 |
| | Direct axis synchro reactance unsaturated (Xd) | 290 % |
| | Quadra axis synchro reactance unsaturated (Xq) | 174 % |
| | Open circuit time constant;50 (T'do) | 3050 ms |
| | Direct axis transient reactance saturated (X'd) | 25 % |
| | Short circuit transient time constant (T'd) | 260 ms |
| | Direct axis subtransient reactance saturated (X''d) | 13 % |
| | Subtransient time constant (T''d) | 26 ms |
| | Quadra axis subtransient reactance saturated (X''q) | 16.3 % |
| | Zero sequence reactance unsaturated (Xo) | 2.6 % |
| | Negative sequence reactance saturated (X2) | 14.6 % |
| | Armature time constant (Ta) | 49 ms |
| | No load excitation current (io) | N/A |
| | Full load excitation current (ic) | N/A |
| | Full load excitation voltage (uc) | N/A |
| | Recovery time (Delta U = 20% transitoire) | N/A |
| Motor start (Delta = 20% perm. Or 50% trans.) | N/A | |
| Transient dip (4/4 charge) – PF : 1.8 AR | N/A | |
| No load losses | N/A | |
| Heat rejection | N/A | |

CONTROL PANEL

Standard



TELYS

Specifications :

- Frequency meter, Ammeter, Voltmeter
- Alarms and faults Oil pressure, water temperature, No start-up, Overspeed, Min/max alternator, Min/max battery voltage, Low fuel level, Emergency stop
- Engine parameters Hours counter, Oil pressure, Water temperature, Engine speed, Battery voltage, Fuel level

Option



KERYS

Specifications :

- Frequency meter, Ammeter, Voltmeter
- Alarms and faults Oil pressure, water temperature, No start-up, Overspeed, Min/max alternator, Min/max battery voltage, Low fuel level, Emergency stop
- Engine parameters Hours counter, Oil pressure, Water temperature, Engine speed, Battery voltage, Fuel level
- Additional specifications Website, Troubleshooting, Assistance and Maintenance, Plotting and logging, Load impact, 8 configurations available, Compliance with international standards...